

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

Claim 1. (currently amended) Sputter ion source, ~~consisting essentially of the components of comprising:~~

a vacuum-tight housing, containing:

an ionizer (2); ;

a sputter cathode, comprising:

a cathode (3); ;

a sputter insert (4); ; and

a shielding cap;

a forming electrode (5), ~~shielding cap (6) and ;~~

a cathode ionizer (7) in a vacuum-tight housing, characterized in that a insulator; and

a shielding cathode (1) is disposed hollow cylindrically about the , having a hollow, cylindrical shape, surrounding said sputter cathode, consisting of the components of cathode (3), sputter insert (4) and shielding cap (6), the shielding electrode (1) , and tapering rotationally symmetrically in the region of the a region adjacent to said sputter insert (4).

Claim 2. (currently amended) ~~The sputter~~ Sputter ion source of claim 1, characterized in that the wherein said shielding electrode (1) ~~is at or approximately at the~~ is on said housing and has an electric potential of the substantially the same as an electric potential of said ionizer (2) and located on the housing.

Claim 3. (currently amended) ~~The sputter~~ Sputter ion source of claim 1, characterized in that the ~~side of the~~ wherein there is a connection between a cathode-facing side of said forming electrode (5), ~~facing the cathode (3), is connected with the~~ and said shielding electrode (1) ~~and the connection between the front side of the forming electrode (5) and the ionizer (2) is omitted, which is an only connection of said forming electrode.~~

Claim 4. (currently amended) ~~The sputter~~ Sputter ion source of claim 1, characterized in that the wherein said shielding electrode (1) is connected ~~with the~~ to a coldest part of the said housing.